

R E M A R K S

Claims 1, 6, 7, 12 and 15 to 18 were rejected under the judicially created doctrine of double patenting over claims 1, 6 and 9 of USP 6,461,768 for the reasons set forth on pages 3 and 4 of the Office Action.

Submitted concomitantly herewith is a Terminal Disclaimer. Withdrawal of the double patenting rejection is therefore respectfully requested.

The presently claimed invention is directed to the following embodiments:

(1) A negative electrode active material for use in an alkaline cell comprising a dry mixture of a conventional alloyed zinc powder and a powder of Bi as an additional metal (see applicants' claim 1).

(2) A negative electrode active material for use in an alkaline cell comprising a dry mixture of a conventional alloyed zinc powder and a powder of Bi as an additional metal incorporated in said mixture in an amount of 50 - 1000 ppm by weight based on the amount of the conventional alloyed powder (see applicants' claim 2).

(3) A negative electrode active material for use in an alkaline cell of low gas generation comprising a mixture of a powder of Bi and a conventional alloyed zinc powder, the mixture being prepared by dry mixing the powder of Bi and the conventional alloyed zinc powder (see applicants' claim 6).

(4) A method of preparing a negative electrode active material for use in an alkaline cell comprising mixing a conventional alloyed zinc powder with a powder of Bi as an additional (see applicants' claim 7).

(5) A method of preparing a negative electrode active material for use in an alkaline cell comprising mixing a conventional alloyed zinc powder with a powder of Bi as an additional metal, the additional metal added in an amount of 50 to 1000 ppm by weight based on the weight of the conventional alloyed zinc powder (see applicants' claim 8).

(6) A method of preparing a negative electrode active material for use in an alkaline cell of low gas generation comprising dry mixing a conventional alloyed zinc powder with a powder of Bi (see applicants' claim 12).

Claims 1, 6, 7, 12 and 15 to 17 were rejected under 35 USC 102 as being anticipated by Shinoda et al. USP 5,376,480 for the reasons set forth beginning at the bottom of page 4 and continuing to the middle of page 5 of the Office Action.

Claims 2, 4, 8, 10, 14 and 18 were rejected under 35 USC 103 as being unpatentable over Shinoda et al. USP 5,376,480 for the reasons beginning at the bottom of page 5 and continuing to the top of page 7 of the Office Action.

It was admitted in the Office Action that Shinoda et al. do not explicitly teach the amount of or particle size of the bismuth dry mixture with the zinc alloy.

One object of Shinoda et al. is to provide an alkaline battery characterized in that a uniformly mixed and distributed mixture of a zinc alloy powder and an effective metal can be produced in a short period of time. This was accomplished by employing a type of mixing and kneading method that comprises dry mixing the zinc alloy powder and the effective metal, placing the dry mixture in a gelatinized alkaline electrolyte and stirring the resulting mixture. Alternatively, a negative electrode can be produced by dry mixing an effective metal, a zinc alloy powder and a powdered gelling agent to obtain a powdered mixture followed by placing the powdered mixture into an electrolyte (see column 2, line 53 through column 4, line 3 of Shinoda et al.).

Shinoda et al. found that by using such a type of mixing and kneading method, the time for uniformly distributing the solid components in an alkaline electrolyte can be greatly shortened and therefore the production efficiency can be significantly improved (see column 3, lines 16 to 20 of Shinoda et al.).

Namely, Shinoda et al. paid attention to a dry mixture of a zinc alloy powder and an effective metal before placing the resulting mixture into a gelatinized alkaline electrolyte, or alternatively to a dry mixture of a zinc alloy powder, an

effective metal and a powdered gelling agent (not required in applicants' claims) before placing the resulting mixture into an alkaline electrolyte. Shinoda et al. did not address the fact that a simple dry mixture itself of a conventional alloyed zinc powder and a powder of Bi as an additional metal is extremely useful for employment as a negative electrode active material for utilization in an alkaline cell, because it enables production of an alkaline battery whose gas generation is greatly improved.

Another object of Shinoda et al. relates to an alkaline battery in which a fiber material is used. It is clear that this aspect of Shinoda et al. is substantially different from the presently claimed invention, wherein a fiber material is not utilized.

Concerning the allegation regarding claims 15 to 17 on page 5, lines 10 to 11 of the Office Action, claims 15 to 17 all depend on claim 1 and, if claim 1 is allowed, claims 15 to 17 should be allowed.

It is therefore respectfully submitted that applicants' claimed invention is not anticipated and is not rendered obvious by Shinoda et al.

Reconsideration is requested. Allowance is solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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